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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,620	01/22/2002	Mitchell J. Rackovan	AVERP2544USA	7070
7590	01/02/2004			
Heidi A. Boehlefeld Renner, Otto, Boisselle & Sklar, LLP 1621 Euclid Avenue, Nineteenth Floor Cleveland, OH 44115			EXAMINER BRUENJES, CHRISTOPHER P	
			ART UNIT 1772	PAPER NUMBER

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/054,620	RACKOVAN ET AL.	
	Examiner	Art Unit	
	Christopher P Bruenjes	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>20031031</u> | 6) <input type="checkbox"/> Other: _____ |

20031121

DETAILED ACTION

WITHDRAWN REJECTIONS

1. The 35 U.S.C. 103 rejections of claims 1-8 and 10-17 over Williams in view of Dohrer of record in Paper mailed June 10, 2003, Pages 5-6 Paragraph 6 have been withdrawn due to Applicant's amendments in Paper filed October 28, 2003.

2. The 35 U.S.C. 103 rejections of claims 18-19 over Williams in view of Dohrer in further view of Call of record in Paper mailed June 10, 2003, Pages 7-8 Paragraph 7 have been withdrawn due to Applicant's amendments in Paper filed October 28, 2003.

REPEATED REJECTIONS

3. The double patenting rejections of claims 1-8 and 10-19 have been repeated for the reasons previously of record in Paper mailed June 10, 2003, Pages 3-4 Paragraph 5.

NEW REJECTIONS

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-8 and 10-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 11, the limitation "soft polar additive" is indefinite because it is not understood what is meant by soft or what soft is referring to. It is also not understood how soft, soft is. Therefore, a "soft polar additive" defines any polar additive.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1, 4-7, 10-11, 16-17, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Peiffer et al (USPN 5,443,895).

Peiffer et al teach a halogen-free, multilayered heat shrink film comprising a core layer and a top layer arranged on either side of the base layer (see abstract). The core layer comprises a copolymer of ethylene and propylene and a propylene homopolymer. The film is used to encapsulate an article as an overall label (col.1, 1.15-20). Within the core layer the copolymer is found in an amount between 30 and 95wt% and the homopolymers is found in an amount between 5 and 40wt% (see abstract). The top layers or skin layers are formed from a polyolefin homopolymer such as ethylene and a copolymer of propylene and butene or blend of the two polymers (col.4, 11.30-54). The film has shrinkage of at least 35% (col.5, 1.50-63). At least one of the top layers is printable, therefore making it a printable layer (col.7, 1.36-41). The layers including the printable layer contain effective amounts of suitable additives such as saturated aliphatic tertiary amines with aliphatic radicals (col.5, 1.3-10), silicon dioxide, calcium carbonate, polyamides, polyesters, or polycarbonates (col.5, 1.22-28). These additives are polar. It is determined that the polar

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additives added by Peiffer et al are "soft" compared to some other additives.

6. Claims 1-8 and 10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Williams (USPN 6,322,883).

Williams teaches a halogen-free multilayered heat shrink film comprising a core layer and at least one skin layer in which one of the skin layers is a printable layer (see abstract). The heat shrinkable film is used for labeling, covering, or packaging of materials and the film is printed on (col.1, 1.53-67). The shrinkage of the film is at least 35% (col.3, 1.40-45). The core layer comprises a blend of a copolymer of polypropylene and butene, in which the butene content is between 5 and 20% (col.3, 1.33-56 and col.4, 1.44-52), and a homopolymers of polypropylene (col.4, 1.44-52). The skin layer is formed from the same materials discussed above for the core layer (col.6, 1.35-44). The skin layer is found on both sides of the core layer and is not necessarily the same composition, for instance one of the skin layers is a polyethylene layer (col.7, 1.7-10) and one of the skin layers is printable making it a printable layer (col.8, 1.19-24). The skin layers including the printable layer contain an anti-blocking agent which is an additive such as polysiloxanes

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(col.7, 1.35-60). Polysiloxanes are polar. It is determined that the polar additives added by Williams are "soft" compared to some other additives.

7. Claims 1-2, 16, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Turnbull et al (USPN 5,948,513).

Turnbull et al teach a halogen-free, multilayered heat shrink film comprising a core layer and two outside layers (see abstract). The core layer comprises linear low density polyethylene (col.1, 1.47-50), which is a copolymer of ethylene with an alpha olefin containing from about 3 to about 12 carbon atoms. The two outside layers comprise linear low density polyethylene and ethylene vinyl acetate copolymer (col.1, 1.47-50), which is a soft polar additive as described by the applicant's specification on page 11, lines 1-19. The laminate is printed (col.1, 1.57-58), which means at least one of the outside layers is a printable layer. The core layer contains 100% by weight of the copolymer, because the layer comprises only linear low density polyethylene which is a copolymer. The heat shrink film is used to encapsulate an article (col.1, 1.10-20). The shrinkage of the film is inherently at least 30%, because the heat shrink film is formed from the same composition

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and layers and used for the same purpose of encapsulating articles.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (USPN 6,322,883) in view of Turnbull et al (USPN 5,948,513).

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Williams teaches a halogen-free multilayered heat shrink film comprising a core layer and at least one skin layer in which one of the skin layers is a printable layer (see abstract). The heat shrinkable film is used for labeling, covering, or packaging of materials and the film is printed on (col.1, 1.53-67). The shrinkage of the film is at least 35% (col.3, 1.40-45). The core layer comprises a blend of a copolymer of polypropylene and butene, in which the butene content is between 5 and 20% (col.3, 1.33-56 and col.4, 1.44-52), and a homopolymers of polypropylene (col.4, 1.44-52). The skin layer is formed from the same materials discussed above for the core layer (col.6, 1.35-44). The skin layer is found on both sides of the core layer and is not necessarily the same composition, for instance one of the skin layers is a polyethylene layer (col.7, 1.7-10) and one of the skin layers is printable making it a printable layer (col.8, 1.19-24).

Although Williams teaches adding additives that are polar, Williams fails to explicitly teach that the core layer is made from a copolymer alone. However, Turnbull et al also teach that the core layer of a heat shrinkable film used for packaging can be formed from a copolymer alone, such as linear low density polyethylene. One of ordinary skill in the art would have recognized that when forming heat shrinkable packaging film the

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core layer is made from a copolymer alone, such as linear low density polyethylene, as taught by Turnbull et al.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to form the core layer of Williams from a copolymer alone, as taught by Turnbull et al.

9. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of Call (USPN 4,756,415).

Williams teaches all that is claimed in claims 16 and 17 as shown above, and Williams teaches that heat shrink films are used for packaging or encapsulating articles such as boxes or cylindrical material, which are the same shape as batteries, but fail to explicitly teach the film for use in encapsulating a battery. However, Call teaches that it is known to use a shrink-wrap material for encapsulating a battery. Typically, this material is a polyethylene (or polyolefin) shrink film (col.3, 1.53-63). Call also teaches that shrink wrap especially of a polyolefin is used for wrapping a battery in order to prevent battery acid leakage during battery storage, handling and installation, and also having the qualities of transparency so that labels and warnings on the battery housing and cover are

visible through the packaging and printability so warnings can be provided on the shrink wrap covering material.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to use the polyolefin shrink-wrapping film of Williams and Turnbull et al for packaging a battery, in order to prevent leakage as well as make the packaging transparent and printable, when polyolefin film wrapping material such as polyethylene is already known to wrap batteries as taught by Call.

ANSWERS TO APPLICANT'S ARGUMENTS

10. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 1-8 and 10-17 over Williams in view of Dohrer have been fully considered but are moot since the rejections have been withdrawn.

11. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 18-19 over Williams in view of Dohrer in further view of Call have been fully considered but are moot since the rejections have been withdrawn.

Conclusion

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12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schoenberg (USPN 4,551,380).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440.

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The examiner can normally be reached on Monday thru Friday from
8:00am-4:30pm.

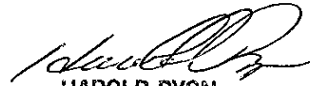
If attempts to reach the examiner by telephone are
unsuccessful, the examiner's supervisor, Harold Pyon can be
reached on 703-308-4251. The fax phone number for the
organization where this application or proceeding is assigned is
703-872-9310.

Any inquiry of a general nature or relating to the status
of this application or proceeding should be directed to the
receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB

December 17, 2003


HAROLD PYON
SUPERVISORY PATENT EXAMINER
11/12

12/23/03